Draft Regulatory Impact Analysis: Control of Emissions of Air Pollution from Category 3 Marine Diesel Engines

Chapter 8: Small Entity Impact Analysis

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This chapter contains the results of our small entity screening analysis for the proposed rule regarding emissions from Category 3 marine diesel engines (i.e., those marine diesel engines with per cylinder displacement at or above 30 liters). This analysis is required under the provisions of the Regulatory Flexibility Act as amended by the Small Business Regulatory Enforcement Fairness Act (RFA/SBREFA). As described below, our analysis shows that there are no small entities that would be impacted by the proposed regulations. Therefore, consistent with EPA's RFA/SBREFA guidelines, we plan to certify that this rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.

This chapter provides some background information on the proposed rule and describes the outcome of our screening analysis. Section 8.1 describes the engine and fuel standards we are considering. Sections 8.2 and 8.3 provide small business information for the diesel marine engine program. Section 8.4 provides small business information for the diesel fuel program.

8.1 Standards Under Consideration

In October 2008, negotiations were successfully concluded for amendments to Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL Annex VI). These amendments, which are based on the proposal submitted to IMO by the United States Government in February 2007, set additional tiers of standards for marine diesel engine oxides of nitrogen (NO_X) emissions and the sulfur content of fuel.

Our Category 3 proposal would add the Annex VI NO_X limits to our Clean Air Act marine diesel engine requirements for Category 3 engines, and create an allowance for the production of diesel fuel specifically for these engines. Specifically, we are proposing to adopt two additional tiers of NO_X limits for Category 3 engines. The Tier 2 standards would result in a 20 percent reduction in NO_X in 2011 as compared to the existing Tier 1 standards, based largely on in-cylinder control technologies. The Tier 3 standards, taking effect in 2016, would rely upon high-efficiency exhaust aftertreatment technology such as selective catalytic reduction (SCR) and would result in an 80 percent reduction in NO_X. We are also proposing to modify our diesel fuel program to allow the manufacture and sale of marine diesel fuel with a sulfur content up to 1,000 parts per millions (ppm) for use in engines with a displacement of more than 30 liters per cylinder.

As explained below, this proposal is not expected to have a significant impact on a substantial number of small businesses.

8.2 Marine Diesel Engine Manufacturers

The responsibility for meeting the new engine standards would fall on the engine manufacturers. Such manufacturers are those primarily engaged in manufacture of large diesel marine engines as defined by North American Industry Classification System (NAICS) code 333618. There are no U.S. companies that manufacture Category 3 marine diesel engines in the U.S.

While there is one U.S. company that is a parent company to a foreign Category 3 engine manufacturing company, this company is not a small business (using the Small Business Administration definition of companies with less than or equal to 1,000 employees), and the engine manufacturing does not occur in the U.S. We are unaware of any foreign manufacturers of such engines with a U.S–based facility that qualify as a small business.

For these reasons, we conclude that the proposed engine regulations would not place a substantial burden on any small U.S. engine manufacturers.

8.3 Vessel Manufacturers

While the primary responsibility for meeting the new engine standards lies with the engine manufacturers, the vessel manufacturers are potentially affected as well in the case of the Tier 3 standards. Such manufacturers are those primarily engaged in the shipbuilding and repairing as defined by NAICS code 336611. Vessel manufacturers will have to accommodate the addition of exhaust aftertreatment hardware in their design and manufacturing processes.

We have identified 6 shipyards in the U.S. capable of producing Category 3 vessels. Of those, most build primarily military vessels. One of these shipyards is owned by a foreign company, and none of these shipyards is a small business that would meet the Small Business Administration definition of 1,000 or fewer employees.

For these reasons, we conclude that the proposed regulations would not place a substantial burden on any small U.S. vessel manufacturers.

8.4 Fuel Manufacturers and Distributors

We are proposing a revision to our diesel fuel program to allow the manufacture and sale of marine diesel fuel with a sulfur content up to 1,000 ppm for use in Category 3 engines. This would allow our regulations to be consistent with the new sulfur limits that will become applicable in 2015 under IMO regulations in Emission Control Areas. Our current diesel fuel program sets a sulfur limit of 15 ppm that is fully phased in by December 1, 2014 for the production of diesel fuel designated for use in Category 1 and Category 2 marine applications (DMX and DMA). Without this proposed change to our diesel fuel regulations, while fuel with a sulfur content of up to 1,000 ppm could be used on Category 3 applications, it would be unlawful to produce, distribute or sell it within the United States.

This revision to our diesel fuel program will not require any person to manufacture, distribute or sell 1,000 ppm sulfur fuel. It simply allows for its production and sale, which is precluded under our current diesel fuel regulations.

This allowance for 1,000 ppm sulfur fuel would be a benefit to those fuel producers, distributors or marketers who choose to produce or sell it, as it allows for higher sulfur content than diesel fuels allowed under current EPA regulations. Since we are not considering mandating production of this fuel, fuel manufacturers, distributors and marketers can opt out of producing, distributing or selling it. Thus, allowing this fuel would not require a mandatory change in any company's business situation. Those companies that would find it beneficial to

produce, distribute or sell this fuel would do so. Conversely, those companies that would not find it beneficial would simply continue to operate the way they otherwise would in the absence of this new allowance.

For the reasons just outlined, the allowance we are considering for 1,000 ppm sulfur marine diesel fuel would not place a substantial burden on any small U.S. refiners, pipeline operators, fuel terminal operators, or fuel marketers.